

A Distributed Radiator Heavy Ion Target Design

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We describe the status of a novel distributed radiator heavy ion target design. In preliminary integrated calculations this target ignited and produced 335 MJ of yield when driven with about 7.5 MJ of 3-3.5 GeV Pb ions. The target has cylindrical symmetry with disk endplates. The ions uniformly illuminate these endplates in a 6 mm radius spot. We discuss the considerations which led to this design together with some previously unused design features: low density hohlraum walls in approximate pressure balance with internal low-Z fill materials, radiation symmetry determined by position of radiator materials and particle ranges, and early time pressure symmetry influenced by radiation shims.

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